EVALUATION REPORT
SILGAN CONTAINERS MFG. CORP.
Application #7277 - Plant #14327

2200 Wilbur Ave.
Antioch, CA 94509

I. BACKGROUND

Silgan Containers has applied for a physical change to the following permitted equipment:

S-1 No. 1 Coater.
S-3 No. 2 Coater.

Currently, the roll cleaner that Silgan Containers uses is a solvent flood type system, which may or may not contain a brush or felt abrasive bar, to wash off coating, which is transferred from the application roll to the back or bottom roll. In addition to the existing system, Silgan also likes to use the solvent-less back roll cleaning scraper to eliminate the need for a solvent wash and to recover coating, which would ordinarily be washed into the solvent and sent out to waste. Since the scraper system works best with solvent borne coatings, and the scraper blade could be damaged if using high pigment coating or waterborne coatings, the applicant requests to use the two systems interchangeably whenever appropriate coatings are being used.

The use of the solvent-less scraper system will not cause an emission increase. In fact, source test results performed on February 7, 2002 at River Bank facility showed 50% solvent loss reduction (see attachment). The company will continue to use the same amount of solvents and coatings as permitted under Condition 2370. There will not be any changes to the condition and monitoring system under its existing District's permit and Title V permit. This application is considered as an administrative change to District permit, and a minor revision to the Title V permit. The description of the equipment as will be revised as follows:

S-1 No. 1 Coater equipped with either Anilox single-roller or Wagner two-roller, and the back roller cleaning system may be either a solvent flood, brush, felt bar or a solvent-less scraper system, abated by A-1 Direct Flame Afterburner.
S-2 No. 2 Coater equipped with either Anilox single-roller or Wagner two-roller, and the back roller cleaning system may be either a solvent flood, brush, felt bar or a solvent-less scraper system, abated by A-1 Direct Flame Afterburner.

II. EMISSION CALCULATIONS

No emission increases

III. PLANT CUMULATIVE INCREASE

N/A

IV. TOXIC RISK SCREENING

N/A

V. BEST AVAILABLE CONTROL TECHNOLOGY

N/A

VI. OFFSETS

N/A

VII. STATEMENT OF COMPLIANCE

Sources S-1, and S-3 Coaters will continue to comply with Regulation 8, Rule 11 – Organic compounds - Metal Container, Closure and Coil Coating.

This application for a proposed new or modified source is classified as ministerial, and is accordingly exempt from the District's California Environmental Quality Act (CEQA) requirement. Since the District's engineering evaluation and basis for approval or denial of the permit application for the project is limited to the criteria set forth in Section 2-1-428 of Regulation 2, Rule 1 and to the specific procedures, fixed standards, and objective measurements set forth in the BACT/TBACT Workbook and Chapter 5.5 of the District's Permit Handbook.

This project is over 1,000 ft from the nearest public school and is therefore not subject to the public notification requirements of Regulation 2-1-412.

PSD, and NESHAPS are not triggered

VIII. CONDITIONS

Condition 2370
For S-1, S-2, S-3 and S-4

1. In no event shall the total combined daily and annual emissions from S-1, S-2, S-3, and S-4 exceed 32.9 tons/year Precursor Organic Compounds (POC). [basis: BACT]

2. The total coating and solvent usage at this facility shall not exceed 104,720 gallons/year unless the operator of this source can demonstrate that a change in coating usage and/or composition would not result in emissions exceeding those stipulated in Part #1. [basis: BACT, Cumulative Increase]

3. VOC emissions from coatings used at sources S-1, S-2, S-3 and S-4 shall be controlled by at least 90% on a mass basis overall (capture and destruction efficiencies combined). [basis: BACT]

4. Precursor Organic Compound (POC) emissions from S-1, S-2, S-3, and S-4 shall be controlled by a Direct Flame Afterburner, A-1 during all periods of operation. [basis: BACT]

5. The Precursor Organic Compound destruction efficiency of the afterburner shall be maintained at a minimum of 98.5%, by weight. [basis: BACT]

6. Afterburner, A-1, shall be properly maintained and kept in good operating condition at all times. In no event shall the afterburner temperature (average of the three thermocouples) be less than 1450 degrees F. when S-1, S-2, S-3, and/or S-4 are in operation, unless the permit holder can demonstrate to the satisfaction of the APCO that the permit conditions can be met with the afterburner operating at a lower temperature. The temperature shall be automatically controlled at all times during operation of S-1, S-2, S-3, and/or S-4. [basis: BACT]

7. To determine compliance with Part #6, the afterburner shall be equipped with continuous measuring and recording instrumentation consisting of at least 3 thermocouple temperature probes in the afterburner and at least one recording device, which will continuously record the afterburner temperature as measured by each of the 3 probes. [basis: BACT]

8. The temperature limit in Part 6 shall not apply during an "Allowable Temperature Excursion", provided that the temperature controller setpoint complies with the temperature limit. An Allowable Temperature Excursion is one of the following:

   a. A temperature excursion not exceeding 20 degrees F; or
   b. A temperature excursion for a period or periods which when combined are less than or equal to 15 minutes in any hour; or
   c. A temperature excursion for a period or periods which when combined are more than 15 minutes in any hour, provided that all three of the following criteria are met.

   i. the excursion does not exceed 50 degrees F;
   ii. the duration of the excursion does not exceed 24 hours; and
   iii. the total number of such excursions does not exceed 12 per calendar year (or any consecutive 12-month period).

   Two or more excursions greater than 15 minutes in duration occurring during the same 24-hour period shall be counted as one excursion toward the 12 excursion limit. (basis: Regulation 2-1-403)

9. For each Allowable Temperature Excursion that exceeds 20 degrees F. and 15 minutes in duration, the Permit Holder shall keep sufficient records to demonstrate that they meet the qualifying criteria described above. Records shall be retained for a minimum of five years from the date of entry, and shall be made available to the District upon request. Records shall include at least the following information:

   a. Temperature controller setpoint;
   b. Starting date and time, and duration of each Allowable Temperature Excursion;
   c. Measured temperature during each Allowable Temperature Excursion;
   d. Number of Allowable Temperature Excursions per month, and total number for the current calendar year; and
   e. All strip charts or other temperature records.
   (basis: Regulation 2-1-403)

10. For the purposes of parts 8 and 9, a temperature excursion refers only to temperatures below the limit.

11. The temperature data collected from the temperature recorder shall be maintained in a file which shall be available for District inspection for a period of at least five years following the date on which such data or reports are recorded or made. [basis: BACT]

12. To ensure emissions capture, the average intake flow velocities (face velocity) at each emissions collection point for the above sources shall be 100 ft/min or more.

    The owner/operator shall verify the face velocity at each collection point on a quarterly basis. (Basis: Regulation 2-6-501)

13. To determine compliance, the operator of this source shall maintain the following data on a daily basis:
    a. operating time of Coating Lines 1 & 2.

b. amount and type of coating applied, by use of a daily measurement and a daily District approved log.
c. amount of clean-up solvent used.
d. a list of all products coated per day and the sheet production rate for each product (sheets/day).
e. film thickness requirements of product being coated.
f. charts from the afterburner temperature recorder.
g. all invoice records of coatings and solvents purchased.
h. thinning ratios for respective coatings being thinned.

Records shall be available for District inspection for a period of at least five years following the date on which such data or reports are recorded or made. [basis: BACT, Cumulative Increase]

14. Rail shipments/receipts from/to the permit holder shall not exceed 50,000 tons during any consecutive 12-month period. A District approved log shall be kept for all rail activity at the facility. [basis: Cumulative Increase]

15. In accordance with the provisions of Regulation 2-3-414, should the facility precursor organic compound (POC. emissions ever equal or exceed 50 tons per year, on a pollutant specific basis, the facility owner/operator shall reimburse the District with emission reduction credits for all offsets of that pollutant provided from the Small Facility Banking Account or its predecessor, the Small Facility Bank. [basis: Offsets]

IX. RECOMMENDATION

It is recommended that administrative change to Permits to Operate be granted to Silgan Containers Mfg. for:

S-1 No. 1 Coater equipped with either Anilox single-roller or Wagner two-roller, and the back roller cleaning system may be either a solvent flood, brush, felt bar or a solvent-less scraper system, abated by A-1 Direct Flame Afterburner.

S-2 No. 2 Coater equipped with either Anilox single-roller or Wagner two-roller, and the back roller cleaning system may be either a solvent flood, brush, felt bar or a solvent-less scraper system, abated by A-1 Direct Flame Afterburner.

Thu H. Bui
Air Quality Engineer II
Permit Services Division

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